

6HM5/6HA5

High-Mu Triode

7-PIN MINIATURE TYPE

Useful as Grounded-Cathode RF-Amplifier Tube in VHF Tuners

Electrical:

Heater Characteristics and Ratings:

Voltage (AC or DC) 6.3 ± 0.6 volts

Current at heater volts = 6.3 0.180 amp

Peak heater-cathode voltage:

Heater negative with respect to cathode 110 max. volts

Heater positive with respect to cathode 110 max. volts

Direct Interelectrode Capacitances:^a

Grid to plate 0.36 pf

Grid to cathode, internal shield, external shield, and heater 4.3 pf

Plate to cathode, internal shield, external shield, and heater 2.9 pf

Cathode to plate 0.080 pf

Cathode to grid, internal shield, external shield, and heater 3.1 pf

Heater to cathode 2.3 pf

Heater to grid 0.070 max. pf

Characteristics, Class A₁ Amplifier:

Plate Voltage 135 volts

Grid Voltage -1 volt

Amplification Factor 72

Plate Resistance (Approx.) 5000 ohms

Transconductance 14500 μ mhos

Plate Current 11.5 ma

Grid Voltage (Approx.) for Transconductance (μ mhos) = 150 -5.7 volts

Mechanical:

Operating Position Any

Type of Cathode Coated Unipotential

Maximum Overall Length 2-1/8"

Maximum Seated Length 1-7/8"

Length, Base Seat to Bulb Top (Excluding tip) 1-1/2" $\pm$ 3/32"

Diameter 0.650" to 0.750"

Dimensional Outline See *General Section*

Bulb T5-1/2

Base Small-Button Miniature 7-Pin (JEDEC No. E7-1)



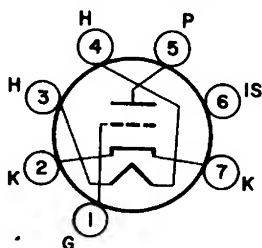
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Basing Designation for BOTTOM VIEW. 7GM

Pin 1 - Grid
Pin 2 - Cathode
Pin 3 - Heater
Pin 4 - Heater



Pin 5 - Plate
Pin 6 - Internal
Shield
Pin 7 - Cathode

AMPLIFIER - Class A₁

Maximum Ratings, Design-Maximum Values:

Plate Supply Voltage.	600 max.	volts
Plate Voltage	220 max.	volts
Grid Voltage:		
Negative-bias value	50 max.	volts
Positive-bias value	0 max.	volts
Cathode Current	22 max.	ma
Plate Dissipation	2.6 max.	watts

Typical Operation:

Plate Voltage	135	volts
Grid Voltage.	Adjusted for grid $\mu a = 10$	
Plate Load Resistance	1000	ohms
Amplification Factor.	80	
Plate Resistance (Approx.).	4000	ohms
Transconductance.	20000	$\mu mhos$
Plate Current	19	ma

Maximum Circuit Values:

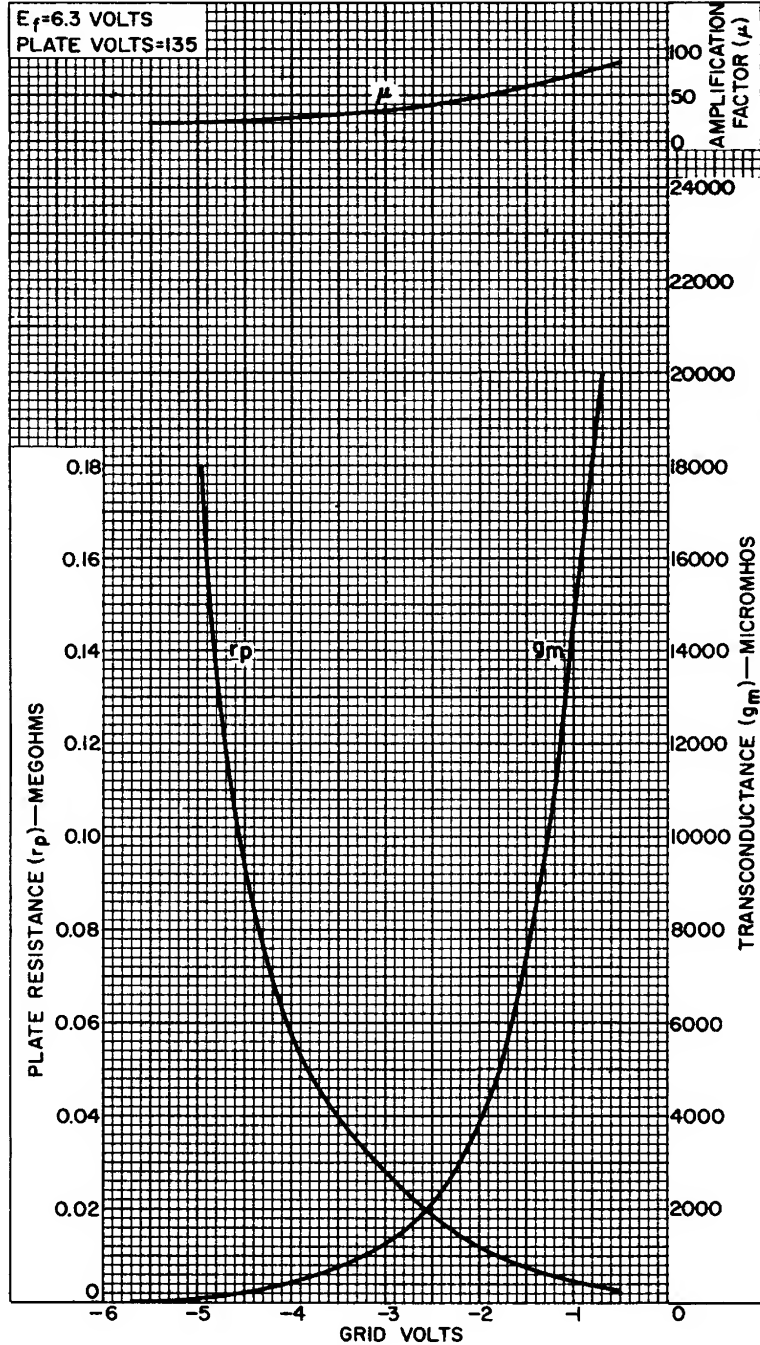
Grid-Circuit Resistance:		
For fixed-bias operation.	1 max.	megohm
For cathode-bias operation.	1 max.	megohm

^a With external shield JEDEC No.316 connected to cathode.



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AVERAGE CHARACTERISTICS



92CM-12224

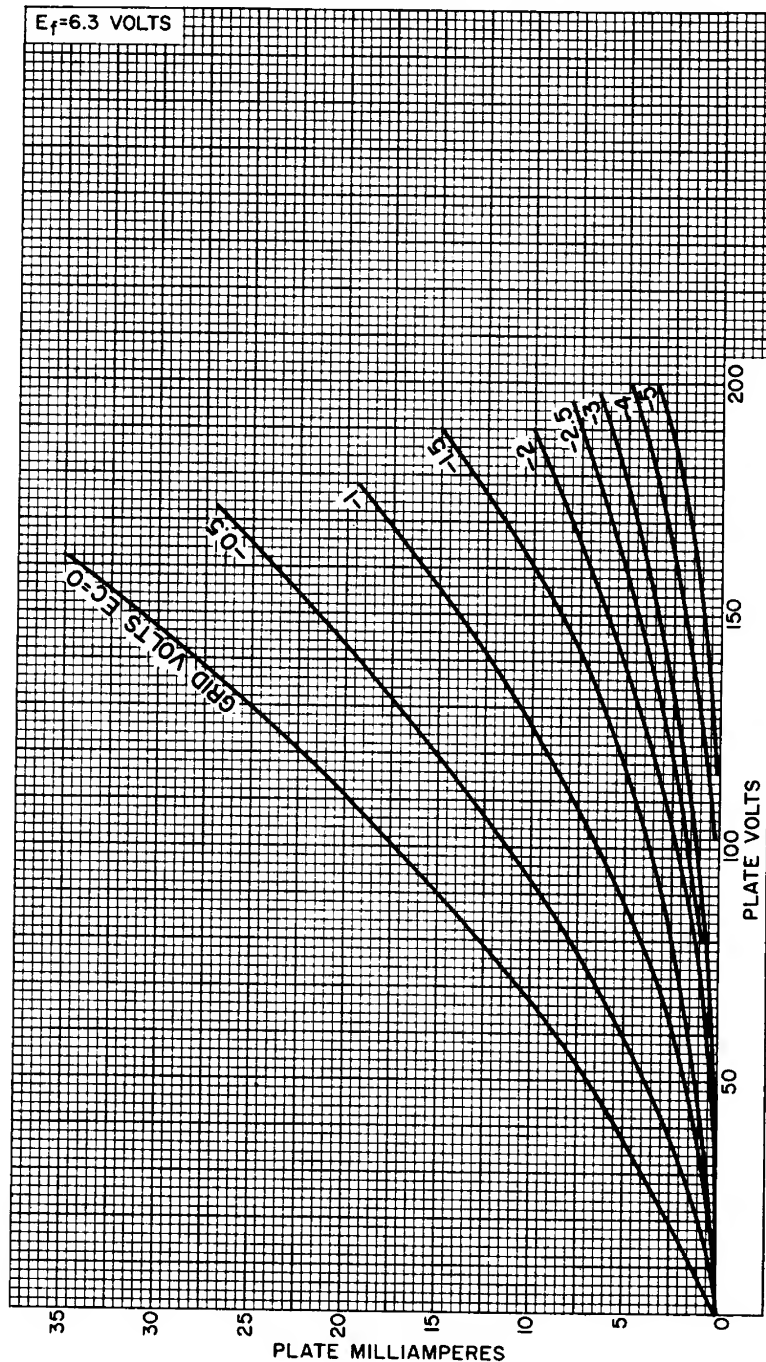


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6HM5/6HA5

AVERAGE PLATE CHARACTERISTICS



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